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Tenth Annual Scientific Meeting (ASM): A selection of abstracts presented

M L Levy

Abstract submission forms for the 11th ASM can be obtained from Strategic Medical Publishing, the address can be found alongside. Closing date Saturday 31st January 1998.

At our 10th ASM which was held on 6-7 June this year, we had a record turnout including a delegation of Swedish doctors. The ASM provides an annual opportunity for the presentation of primary care respiratory research and a forum for sharing practical management and research issues, as well as knowledge on the subject. The quality of papers and abstracts presented this year were of a very high standard, some of which are published in this issue of *Asthma in General Practice*. Due to limited space we are unable to publish all those papers that were accepted for the ASM. However, next year we will be producing a special conference supplement, to coincide with the 11th ASM, which will include all those abstracts submitted and selected for presentation at the meeting, providing they are not (or due to be) published elsewhere.

The ASM provided an opportunity for the unveiling of our new logo which reflects the GPIAG's focus upon all respiratory diseases in primary care. The selection of workshops held on the Friday afternoon included a practical, informative session on spirometry which encompassed our new ethos. In addition, this workshop provided a timely introduction to lung function assessment in anticipation of the forthcoming release of the British Thoracic Society guidelines on chronic obstructive pulmonary disease (COPD). An 'Internet Cafe' hosted by the GPIAG Research Unit provided hands on 'net surfing' experience for participants. Workshops during the conference addressed subjects including the management of wheezing pre-school children, COPD, nurse prescribing and the internet.■

Mark Levy
General Practitioner, Asthma in General Practice *Editor*

Correspondence to: Strategic Medical Publishing Ltd, Action International House, Crabtree Office Village, Eversley Way, Thorpe, Egham, Surrey TW20 8RY.

Asthma following childhood pneumonia: a six year follow-up study

C E Clark, School Surgery, Devon

Introduction

A pilot study[1] has suggested that childhood pneumonia may be a marker for undiagnosed asthma. The original cohort studied have been followed-up after six years to explore the association further.

Method

A written questionnaire seeking details of further respiratory illness and any diagnosis or treatment of asthma was sent to the patients' general practitioners (GPs), where they could be traced. A further respiratory symptom questionnaire[2] was sent to the children (or their parents).

Results

One hundred and ten GP letters were sent and 109 replies received (99% response). In combination with the data from the first study there was follow-up information for 122 children (93% of original cohort). The mean follow-up period of this study was 73 months.

Before their pneumonia there were 19 (16%) known asthmatics. The cumulative total at first follow-up

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was 28 (28%) and at second follow-up 57 (47%). The rising prevalence of asthma was not matched by a rise in the proportion treated (Table 1). One hundred and nine patients were sent the symptom questionnaire, and 94 returned the completed forms (86% response rate). The patient symptom scores were not significantly different between treated and untreated asthmatics (3.4 vs 2.2; $\chi^2 = 5.01$; $p = 0.08$).

Table 1: Rise in prevalence at each stage
($\chi^2 = 12.54$; $p < 0.005$)

Time of diagnosis	Asthmatics (no.)	No. on any treatment
Before pneumonia	21	21
By first follow up	28	17
By second follow up	51	30

The mean interval between admission with pneumonia and a diagnosis of asthma (given for 29 cases) was 24 months (range 1-63). A diagnosis of asthma was associated with a family history of asthma (odds ratio 5.71; 95% CI 2.1-15.9; $p < 0.001$, Yates corrected χ^2) and personal history of atopy (OR 3.55; 95% CI 1.1-12.5; $p = 0.04$, Yates corrected χ^2).

Discussion
This second study has revealed a further 29 cases of asthma diagnosed in children with a history of pneumonia. The cummulative incidence of 47% indicates the importance of follow-up and suggests that bronchial hyperreactivity following a pneumonia, which declines with time, is unlikely to be the explanation.[3] The associations with atopy and family history are to be expected in a group of asthmatics and support the diagnosis.

The rising number of asthmatics at each stage was not followed by an increase in the number on treatment and the symptom scores suggest that they are being undertreated.[4] Regular follow-up, which may be assisted by a symptom questionnaire, is recommended.■

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Identification of COPD patients in a practice asthma list

K Gruffydd-Jones, Box Surgery, Wiltshire

Method
Records of the 140 patients over 50 on the practice asthma list were analysed. Four patients had a stated diagnosis of COPD. One hundred and twenty three patients were invited to have their FEV_1 reversibility tested by a 14 day course of oral steroids. Only 33 patients were tested.

Results
Eighteen patients were found to have COPD (FEV_1 reversibilty <15%) and 15 had asthma (FEV_1 reversibility >15%).■

Asthma in Gen Pract 1997; **5(2):** 25.

A qualitative study of patients' attitudes to their asthma and its treatments

K T Kibble, Norfolk and Norwich Hospital

Background
Asthma is an increasingly common disease, symptoms and ill health affect approximately three million people in Great Britain. The prevalence of asthma in adults is stated as between 5-7% and disturbingly the prevalence in children is as high as 10-15%.[1] Asthma is also potentially fatal, and despite medical advances it causes approximately 2000 deaths each year.[2] Research indicates that many deaths and much ill health are related to poor drug compliance and underestimation of symptoms, and therefore could be potentially preventable.[3, 4]

Introduction
Despite an increasing awareness of asthma and effective treatments, studies indicate that 30-70% of prescribed medications are not taken. There is little research examining the attitudes and experiences of asthmatic patients themselves. Using patients' own accounts of their asthma a small study was conducted to discover how they view their prescribed treatments and care, and whether these factors influence compliance with medications.

Methods
Ten asthmatic patients were interviewed in the asthma clinic, in a general practice setting. Following the interview patients were asked to complete a questionnaire to identify their needs and assess their satisfaction with the asthma clinic.

Results

Table 1: Common themes

Attitudes to the illness itself
• Frustration • Anger • Denial
Physical limitations of the illness
• Acceptance of reduced quality of life
• Avoidance of trigger factors
Concerns and poor understanding of asthma
• Fear of breathlessness
• Misunderstanding of disease process
• Underestimation of severity of symptoms
Attitudes to treatment
• Fear of dependence
• Fear of medication becoming ineffective
• Concerns about using in public
• Stigma-labels of psychosomatic

Common themes emerged from both the interviews and the questionnaires. Four major themes were identified (Table 1) which were of importance to patients themselves, and appeared to influence their compliance with prescribed treatments.

Conclusions
The interviews enabled an enriched insight into patients' experiences. The described experiences vividly portrayed the impact that asthma has upon many people's lives. Findings suggest that patients want to be involved in their care. Furthermore, if time is taken to explore patients' individual perceptions of their asthma and its treatments, then the care provided is more likely to meet patient's needs and improve their compliance with medications.■

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Computer assisted management of patients with asthma

C McCowan, R G Neville, I W Ricketts, F C Warner, A Y Cairns, R A Clark, G E Thomas, Tayside Centre for General Practice, Dundee

The introduction of clinical guidelines for an increasing number of conditions has placed greater pressure on general practice. During patient consultations, general practitioners (GPs) and practice nurses (PNs) will not always have time to consult guidelines but will be expected to offer the best possible care based on their recommendations.

The Asthma Research Project Team, based at the University of Dundee has developed a computerised decision support system for the management of asthma linked to the British Thoracic Society Treatment Guidelines. The program considers the consulting patient's current condition and treatment before suggesting a future management plan. It also gives a scenario of the future morbidity for the patient, based on analysis of similar patients in a database of over 11,000 records. The clinician and patient have an opportunity to discuss current problems and to then agree upon a course of treatment. The software produces printed output of this management plan for both patient and clinician. This output offers a chance to provide the patient with current asthma education. The program allows the GP or PN to offer the patient the best possible care, and also standardises a protocol for asthma care within the practice.■

Compilation of primary care asthma database for East Norfolk Health Authority (ENHA) by the Norfolk Respiratory Interest Group (NRIG)

L Pearce and M Duerden, East Norfolk Health Authority

Introduction
The NRIG (health professionals from primary care, secondary care and the authority) felt there was a lack of coherent information in East Norfolk on primary care asthma service provision. Such information would help hospitals more readily contact key workers regarding patient treatment, identifying training needs and facilitating development of asthma services.

Method
The questionnaire was sent to practice managers for maximum response (following experience in Suffolk). The questionnaire asked for details on asthma service provision, lead GPs, designated asthma nurse (DAN), and asthma training. Where information was lacking, details were obtained by telephoning the practice.

Results
Eighty three out of 93 practice centres returned the questionnaire, the remainder were telephoned. Forty six out of 93 have asthma clinics. Nineteen allocate time during normal surgeries. Twenty eight have no specific arrangements. Eighty seven practice centres have DANs (some practices have more than one DAN, with differing qualifications) (Table 1).

Table 1: Qualifications of DANs

Qualifications	Practices with DAN	No. of DANs
Diploma	60	87
Study day	23	29
None	10	21

Discussion
This project facilitated the compilation of a current, accurate database of primary care asthma service provision in East Norfolk. This is available to local hospitals and has been used within ENHA. It is hoped this will facilitate an improvement in care of asthma patients. (NRIG is supported by a grant from Allen and Hanburys.)■

An assessment of training needs of East Norfolk (EN) primary care asthma nurses, on behalf of the Norfolk Respiratory Interest Group (NRIG)

L Pearce, H Matthews**, M Dolding***, T P McCarthy***, *Felixstowe, Suffolk, **Hemsby Group Practices, Norfolk, ***Norfolk and Norwich Hospital*

Introduction
The NRIG (health professionals from primary care, secondary care and the authority), assessed current asthma training among nurses in primary care in EN, to help plan and develop future training courses.

Method
Pilot and follow-up questionnaires were sent to 84 practices. Levels of specific training needs and preferred methods of training of the nurses were investigated.

Results
Sixty two out of 84 (74%) questionnaires were completed. Ninety two per cent of nurses regularly cared for asthma patients, 34% were not fully implementing asthma knowledge. Levels of involvement with patients were categorised as: minimum – 15%, medium – 34% and maximum – 49%.

Further training needs were identified as follows: childhood asthma – 46%, acute exacerbations – 39%, diagnostic tests – 34%, patient self-management – 30%, asthma medications – 30%, inhaler devices – 28%.

Qualifications held:
Degree – 7%, National Asthma and Respiratory Training Centre diploma – 59%, other asthma diplomas – 20%, respiratory qualification – 3%, none – 30%.

Study:
a. Preferred level: introductory – 15%, diploma – 34%, degree – 36%.
b. Preferred method: distance learning – 28%, supervised practice – 25%, block study – 25%, day release – 71%, combination – 53%. Other areas where educational interest was expressed: COPD – 89%, lung cancer – 56%, TB – 51%.

Discussion
Areas of further training needs, and educational interest in respiratory medicine were identified. An asthma study day, attended by over 100 delegates, addressed some needs identified by the study. Current and future programmes will be developed so that nurses may access respiratory courses to degree level.

Asthma in Gen Pract 1997; **5(2):** 26.

This study will be repeated to ascertain how the training needs have been addressed. We plan to extend it to community and secondary care nurses. (NRIG is supported by a grant from Allen and Hanburys.)■

Three eminent asthmatics or was it asthma?

G Plaut, Halstead, Essex

King William III

King William III was reported to have suffered frequently from difficulty in breathing. To be away from the polluted air in London he lived at Hampton Court enjoying open air sports. His good health was interspersed with dyspnoea leaving little doubt the correct diagnosis is asthma.

Dr Samuel Johnson

It is surprising that Dr Johnson was able to produce his famous dictionary. He suffered greatly from respiratory illnesses, and from de la Tourette Syndrome (a rare neurological disease). His disease was named 'convulsion of the lung'. Post-mortem examination revealed emphysema and bronchiectasis, as well as heart failure.

Frédéric Chopin

Chopin was thought to suffer from consumption. He was intolerant to certain foods and found benefit from belladonna (atropine). He suffered from vomiting and coughing up blood, as well as breathlessness. A post-mortem examination by Professor Curveilhier, known for his careful work, revealed an enlarged heart and no evidence of tuberculosis. It is now suggested he had α_1-antitrypsin deficiency disease.[1]■

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Barriers to effective asthma care in the inner cities

A Riaz and C Bradley, Department of General Practice, The University of Birmingham

Introduction

Variations in the management of asthma have been noted. Studies after both releases of the BTS guidelines suggest that these guidelines have had only a modest impact in curbing this variation. This study was undertaken to identify some of the barriers to more effective management of asthma in inner city practices and to use this information in designing interventions to overcome the barriers.

Methods

A purposive sample of 25 practitioners working in inner city Birmingham were invited to take part in semi-structured interviews. These interviews were conducted by a clinical research fellow, transcribed and the data analysed using Thematic Content Analysis.

Results

Fourteen GPs took part. Most were males and non-fundholding. Nearly half were over 50 years old and single-handed. The ethnicity of the practice populations varied greatly. Numerous factors obstructed these GPs: high consultation rates, lack of resources/support, deprivation, illiteracy, poor compliance, low morale, lack of time/skills to identify and appraise literature. Computerised group practices with a particular interest in asthma seem to be able to push past some of these barriers. Some of this information has been used to devise interventions.

Conclusions

These results represent the views of 14 volunteer GPs and may not be generalised to all GPs. However, it is only by defining barriers that appropriate strategies can be devised to facilitate the delivery of optimal care to asthmatics. This qualitative study has shed some light onto some of the factors responsible for the poor uptake of guidelines. The interventions devised are being evaluated in two ongoing studies.■

Review of the management of fifty patients admitted to hospital with acute asthma

G Strube, Crawley, West Sussex

Objective

To find whether the management of patients admitted to hospital with acute asthma could be improved and whether disability from chronic asthma could be reduced.

Setting and design

Fifty patients admitted to hospital with acute asthma were interviewed by respiratory nurses with the aid of a questionnaire.

Results

Table 1: Chronic symptoms between attacks

Chronic symptoms and actions	No. of patients
• Interferes with normal activities	37 (74%)
• Woken at night by wheeze or cough	41 (82%)
• Uses a PEF meter:	
everyday	25 (50%)
only during attack	12 (24%)
keeps record of symptoms & PEF readings	13 (26%)
knows predicted (normal) PEF	16 (32%)
• Alters own dose of inhaled steroids	
according to symptoms and /or PEF	13 (26%)

Seventy five per cent of admissions could probably have been avoided by appropriate treatment. Only half the patients with previous admissions had their own supply of oral steroids and only a third of these had taken them within six hours of onset of the attack. Most patients (80%) continued with chronic symptoms after the attack (Table 1), few of them changed their treatment (26%) or consulted their GP (11%).

Conclusion

Earlier use of oral steroids with high doses of bronchodilators could have controlled the majority of these attacks. This can only be achieved by patients carrying their own supply of steroids and knowing when to use them. Treatment should be reviewed soon after a severe attack or hospital admission.

Disability from chronic asthma could be reduced by better assessment with reversibility testing using a course of oral steroids in patients with PEF less than 80% of predicted or those regarded as having COPD.■

Asthma in Gen Pract 1997; **5(2):** 27.